

Water Quality, Water Quantity, and At-risk Trout

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CPAWS SOUTHERN ALBERTA

JUNE 24TH, 2021



Importance of the Eastern Slopes for Water and Aquatic Species at Risk

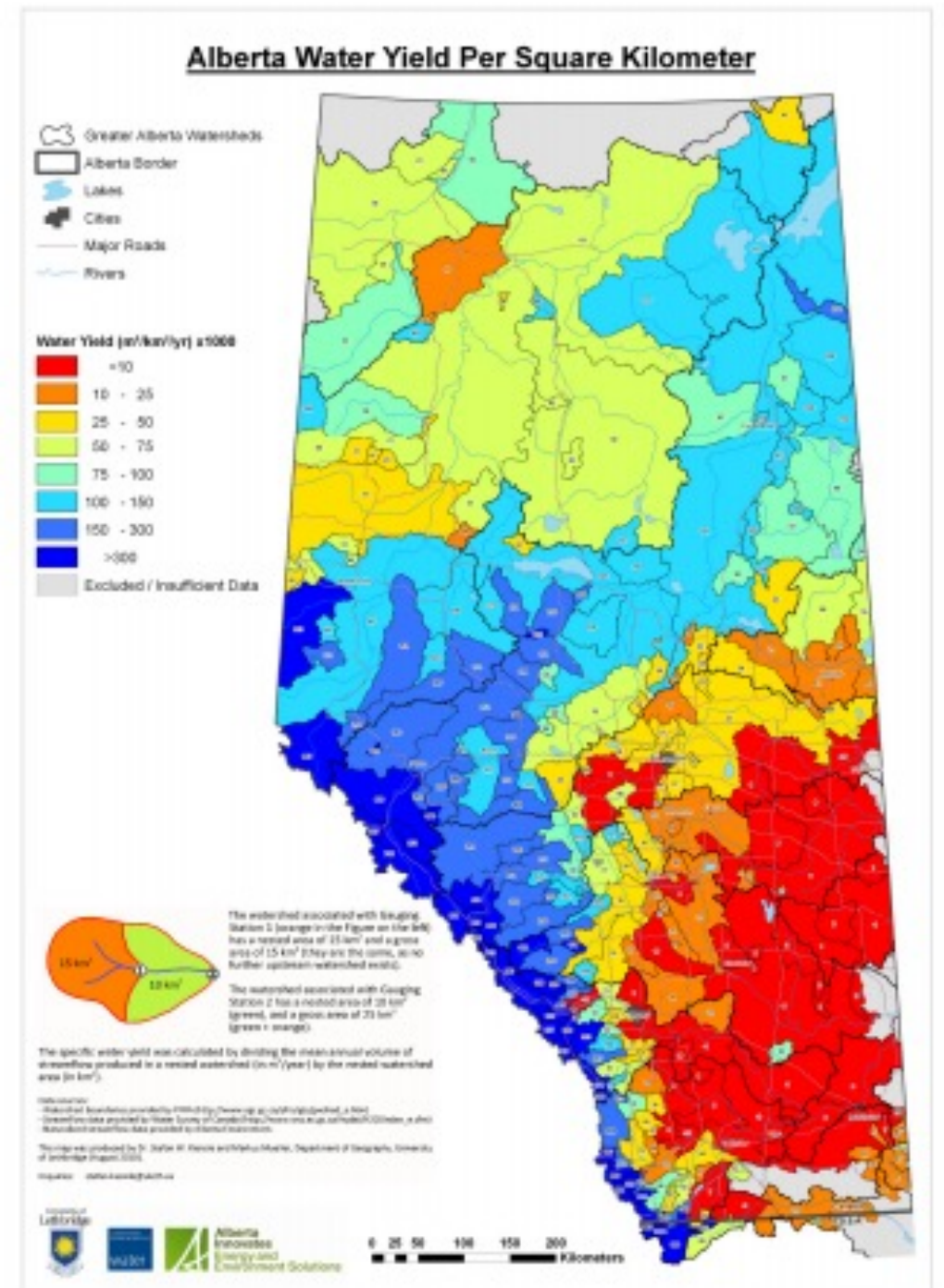
1. Water Quantity

2. Water Quality

3. Aquatic Species At Risk



Water Quantity

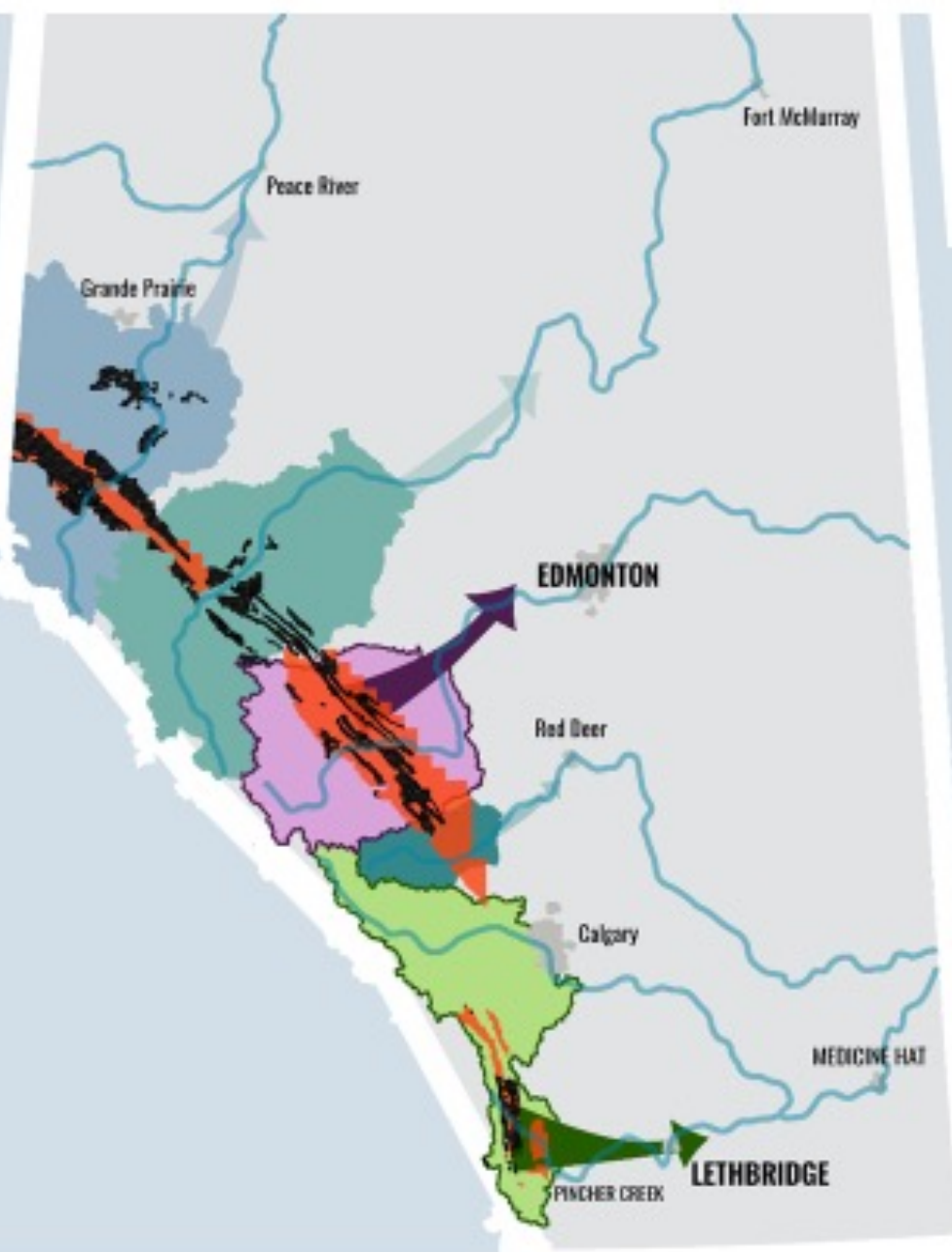




Removal of the Alberta Coal Policy puts our water quality and quantity at risk.

The Coal Policy previously prevented open-pit coal mining in sensitive areas of the Rocky Mountains where source waters flow to Albertan communities. **By re-opening these areas for open-pit coal mining, the Alberta government is putting all of our communities at risk.**

In particular, there are large areas of overlap in pre-existing coal agreements and the re-opening of open-pit mining in watersheds that flow to Edmonton, Lethbridge and their surrounding communities. The effects on water will be felt downstream by an estimated **1.4 million Albertans** served by the North Saskatchewan watershed and **267,000 Albertans** served by the headwaters of the Oldman River.

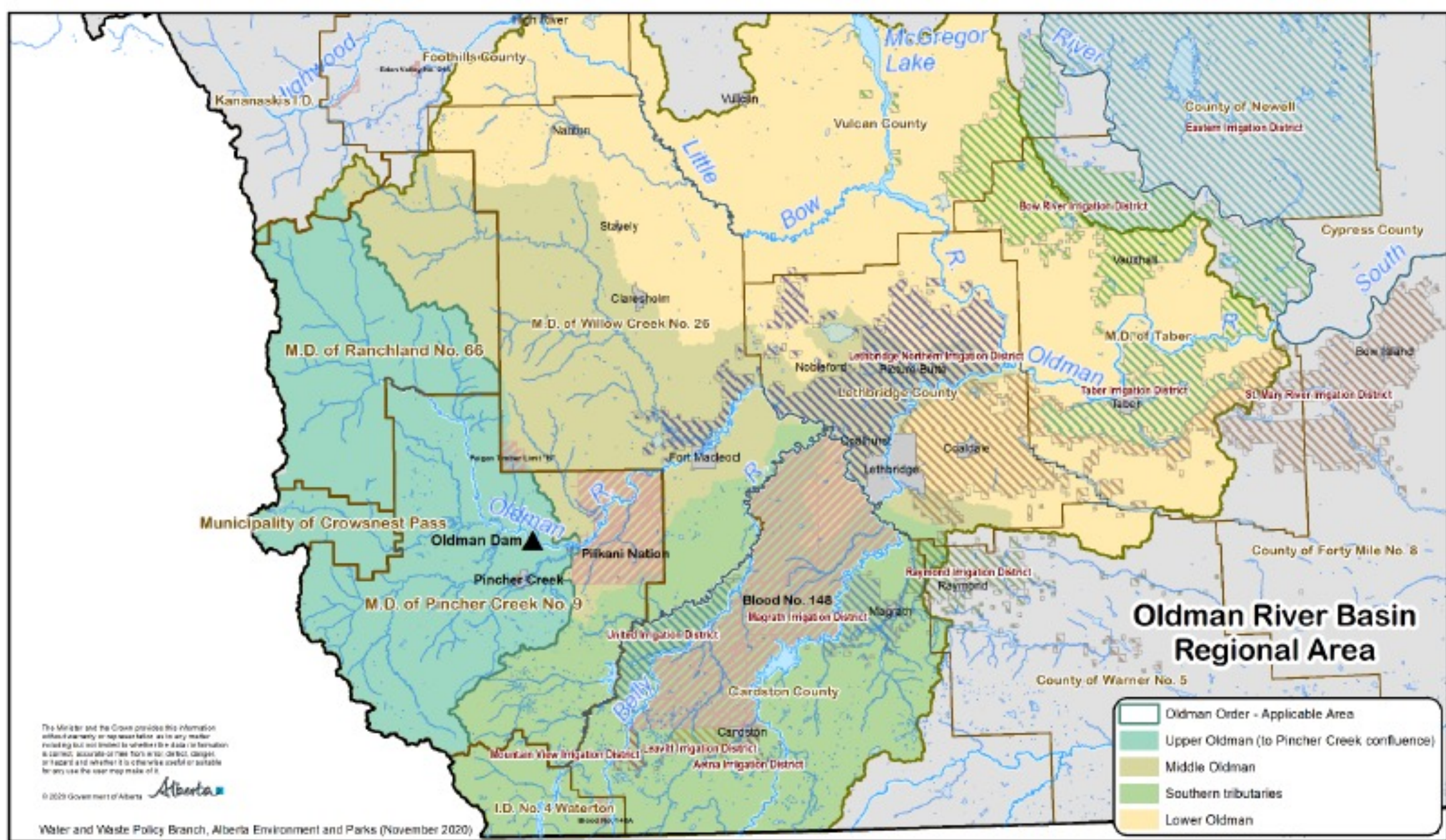


SOURCE WATERS WITHIN ALBERTA

- North Saskatchewan → Edmonton area water supply
- South Saskatchewan → Lethbridge area water supply
- Upper Smoky
- Upper Athabasca
- Red Deer

EFFECTS OF REMOVING COAL POLICY

- Open-pit mining now enabled (previously protected as Category 2 under Coal Policy)
- Coal agreements



Water Source: WaterSmart

- Water licences review for entire watershed
 - Discussions with government for water licenses transfer and/or resource allocations
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- Water licences or allocations for coal processing are to be permitted under the Alberta Water Act, and may also be granted or transferred from other licence holders

Atrum April 2020 Investor Report

All new coal projects in the Upper Oldman Basin would conservatively need ~4000 acre-feet of water

A wide-angle photograph of a large indoor swimming pool during a competition. The pool is filled with water, and several swimmers are visible at the starting blocks, preparing for a race. The pool is divided into lanes by blue and red lane lines. In the background, there are large stands filled with spectators. The pool deck is lined with various sponsor banners, including 'e-on', 'arena', and 'UNIVÉ'. A large banner in the background reads 'Eindhoven 2008'. The text '1,972 Olympic sized swimming pools' is overlaid in the center of the image.

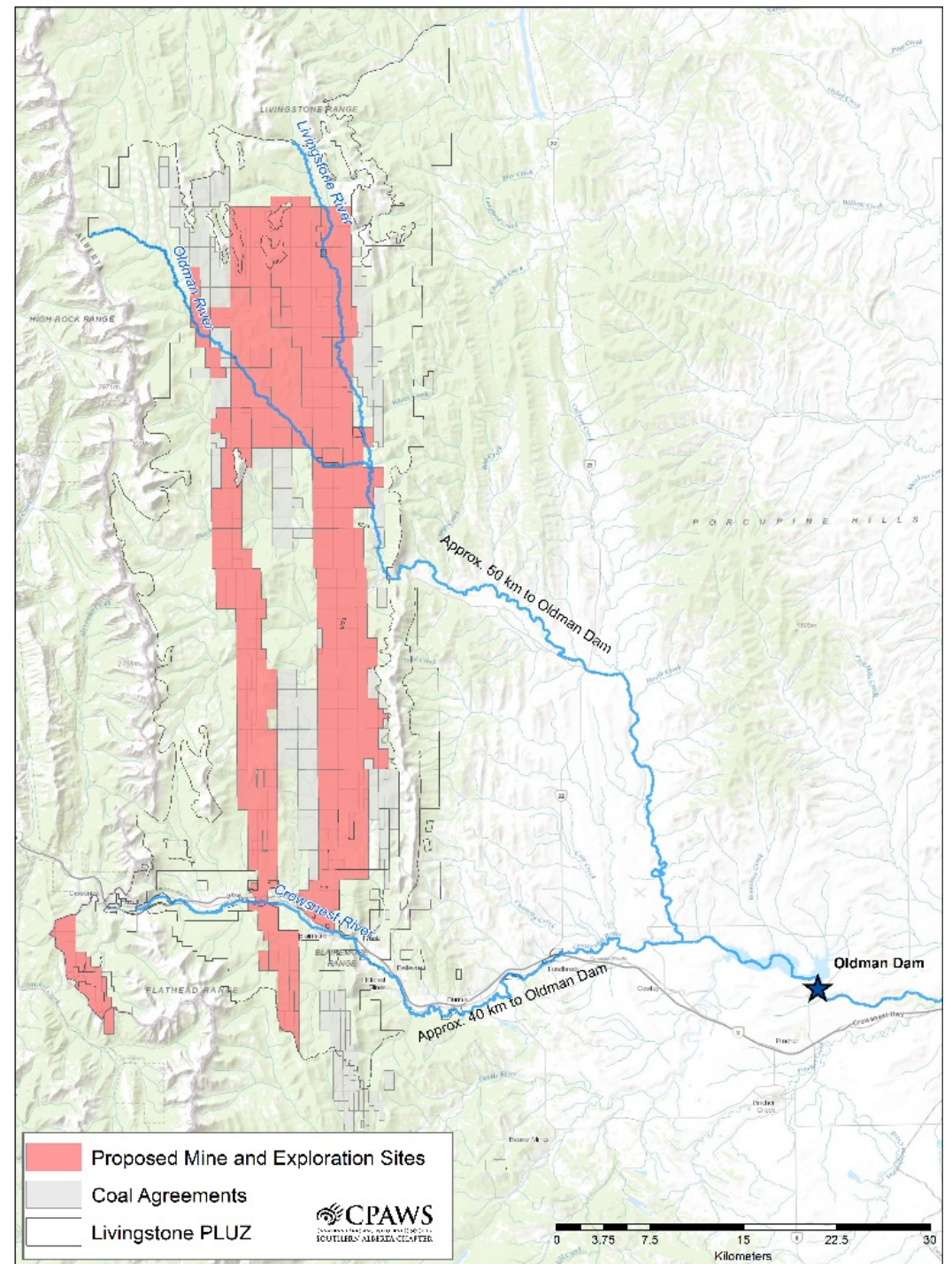
1,972 Olympic
sized swimming
pools



14.5 Sylvan Lakes

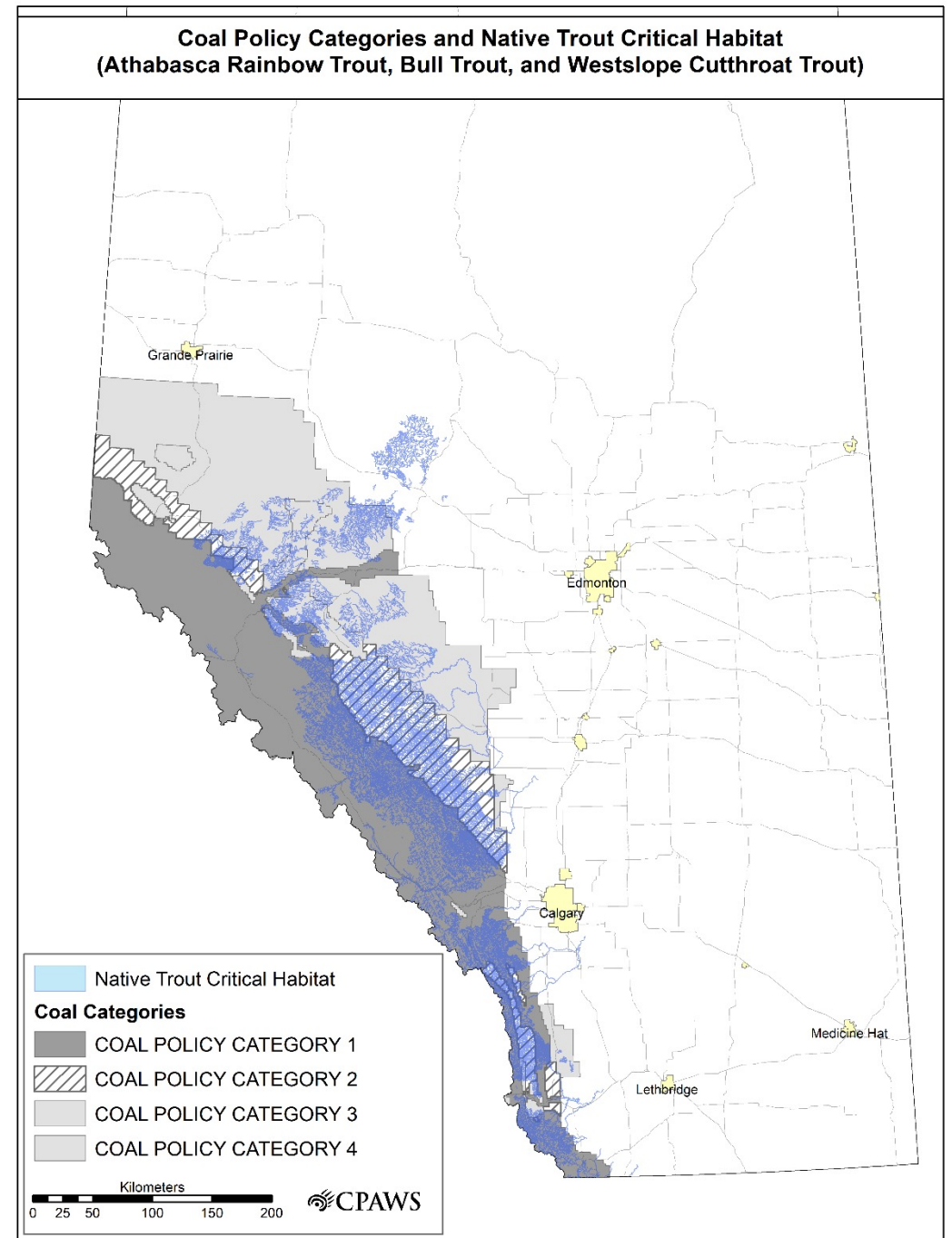


Water Quality





Coal Policy Categories and Native Trout Critical Habitat



Native Trout Habitat – Southern Alberta

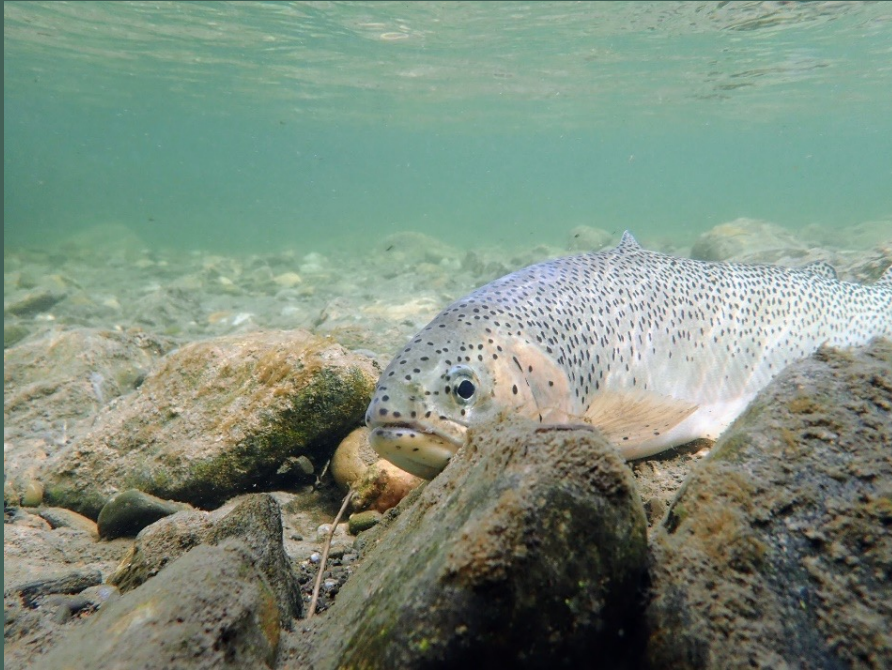
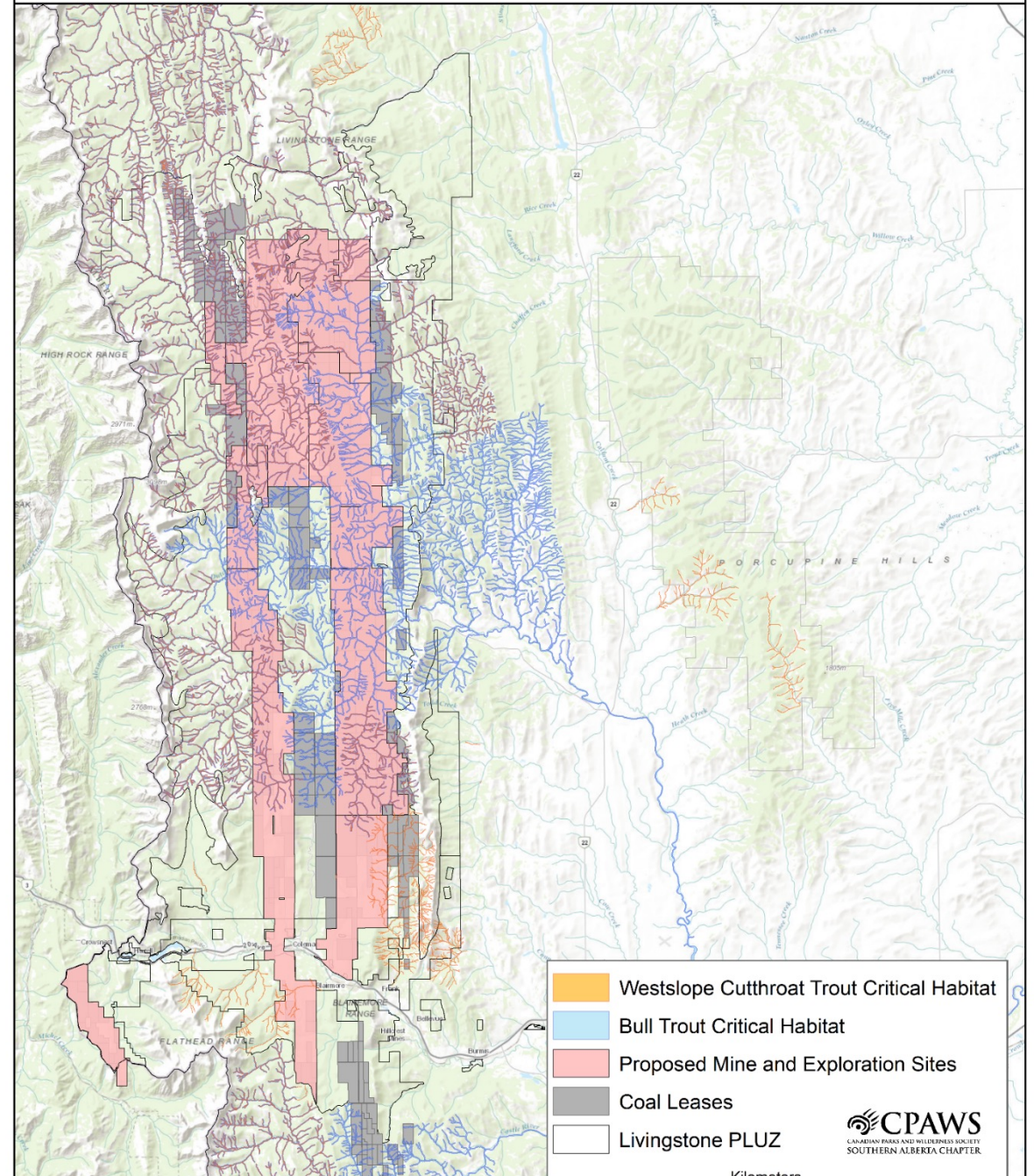


Photo: Marc Fossi

Livingstone PLUZ: Proposed Coal Mine/Exploration Sites and Native Trout Critical Habitat



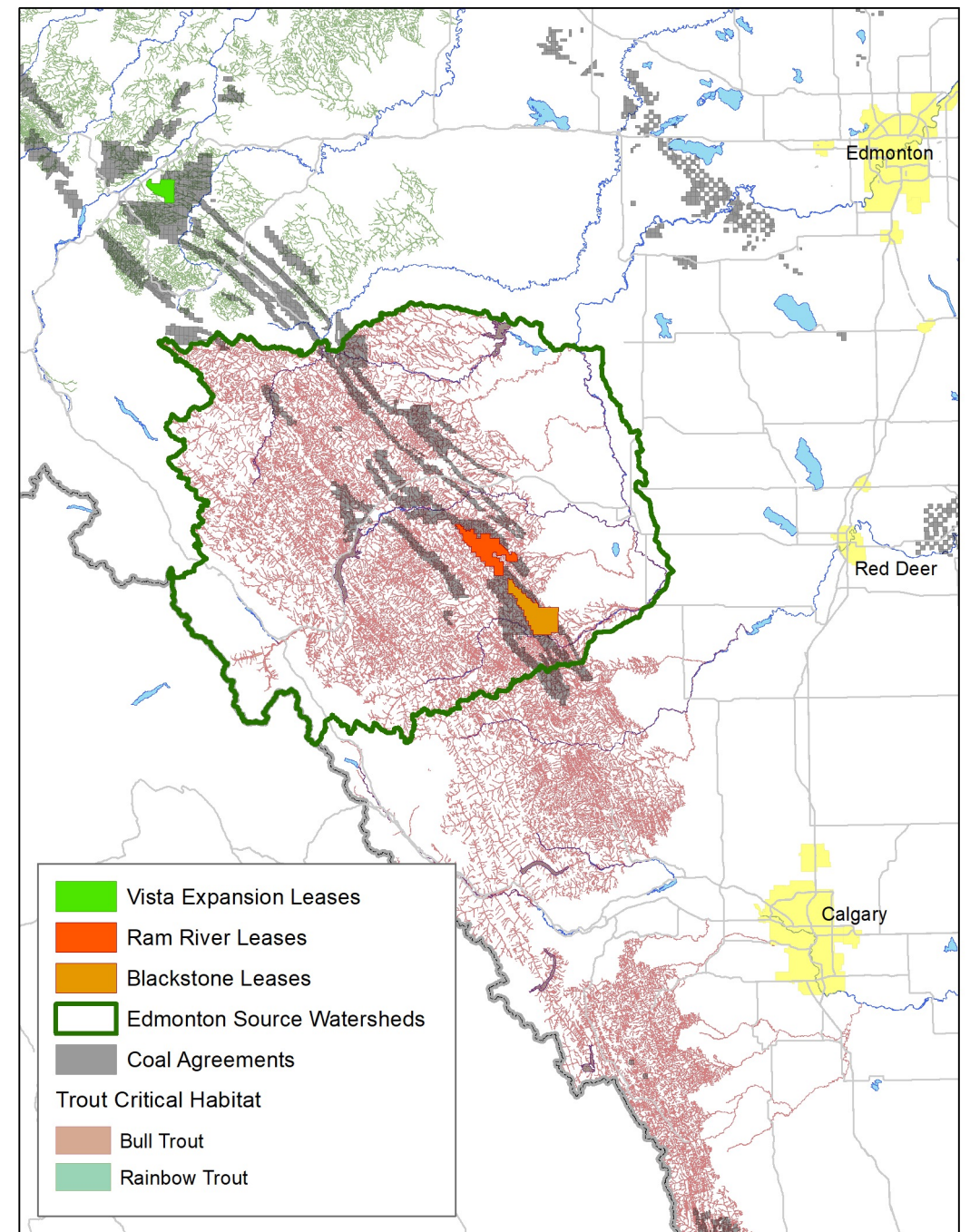
Native Trout Habitat – Central Alberta



Photo: J. Stewart, DFO



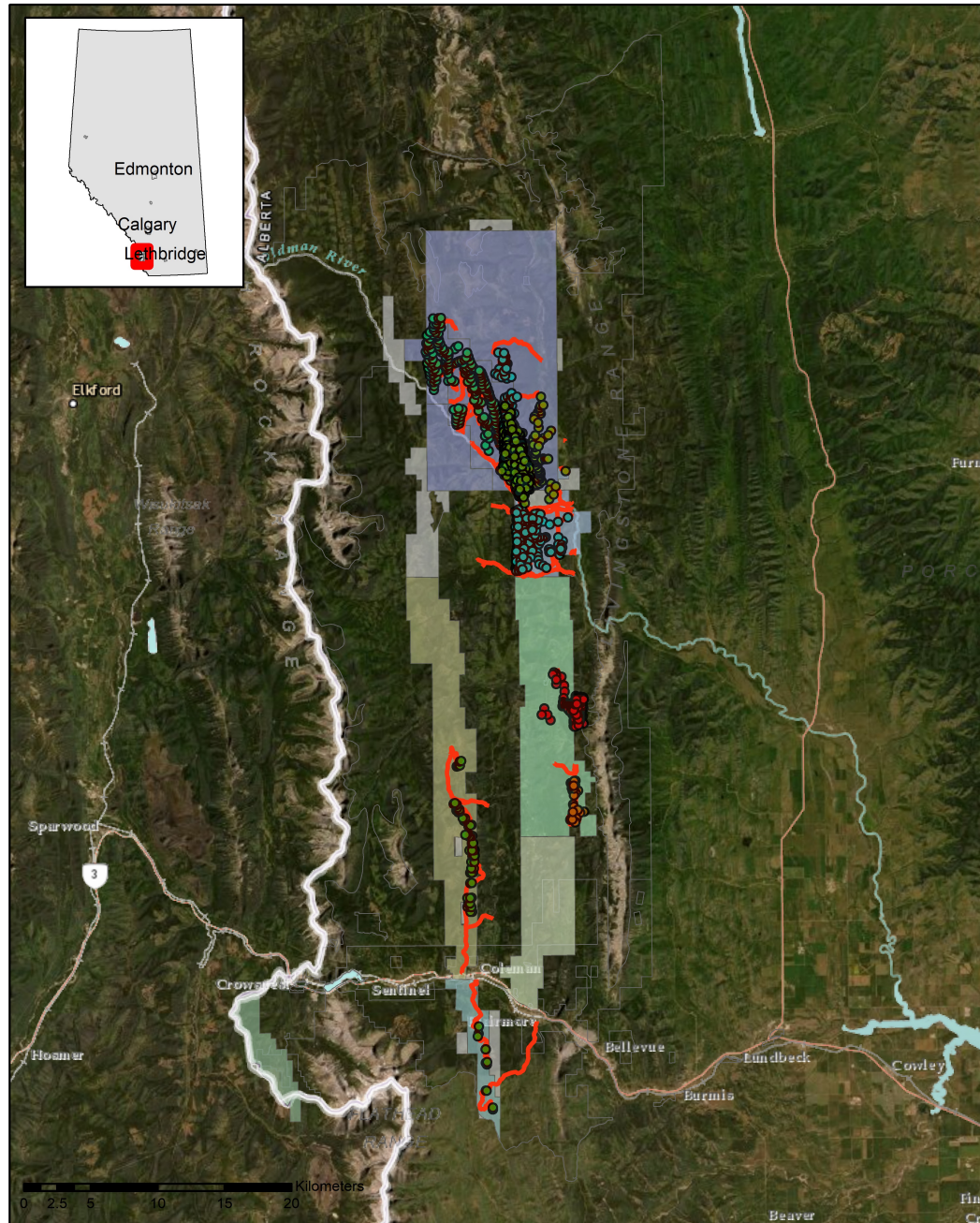
Photo: Government of Canada



Mitigation



Exploration Impacts



Coal Exploration Program (CEP) Disturbance

Drill Holes

- Elan 2020
- Cabin Ridge 2020
- Montem 2020
- Elan 2019
- Elan 2019
- Elan 2019

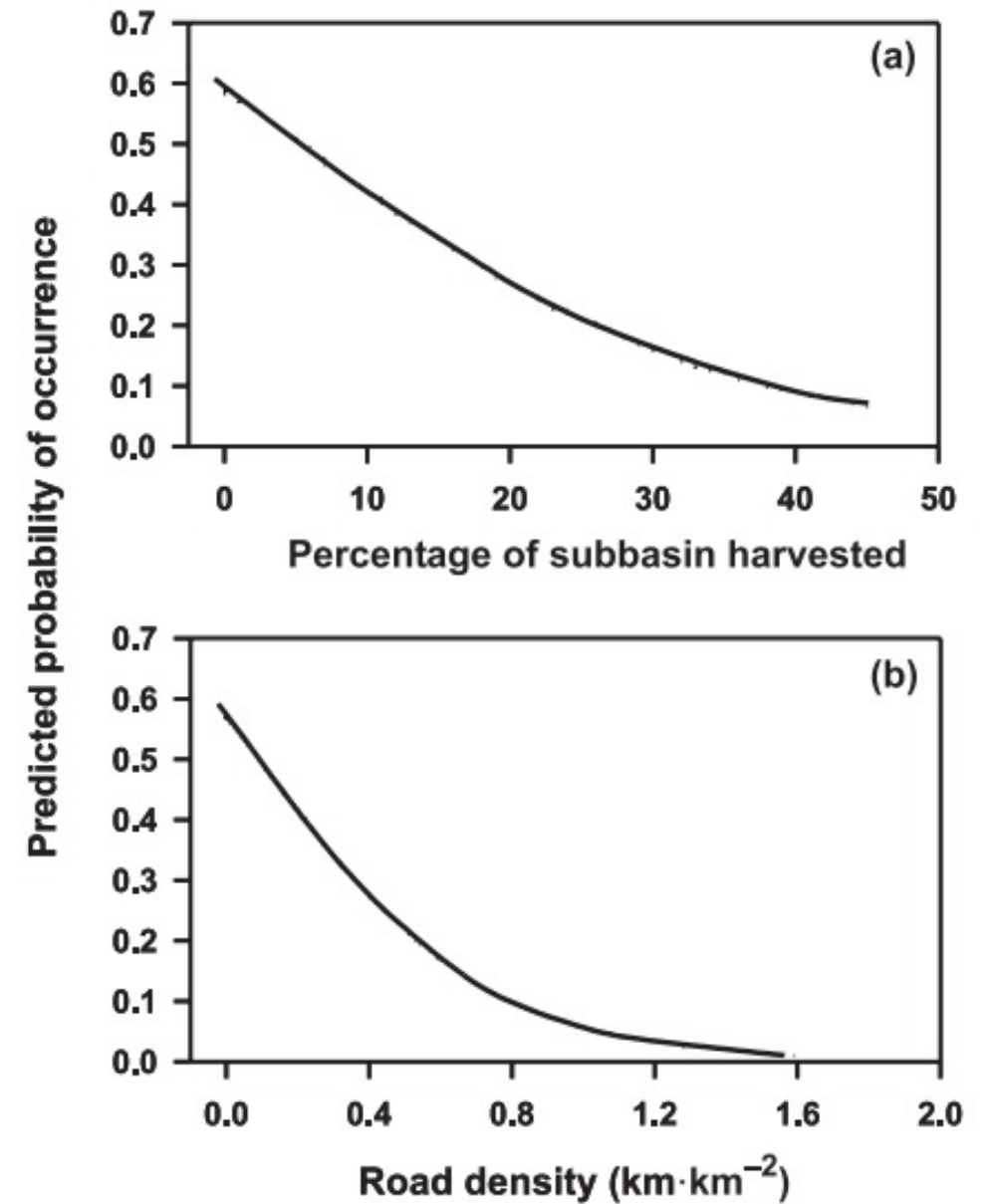
— CEP Roads

Coal Project Boundaries

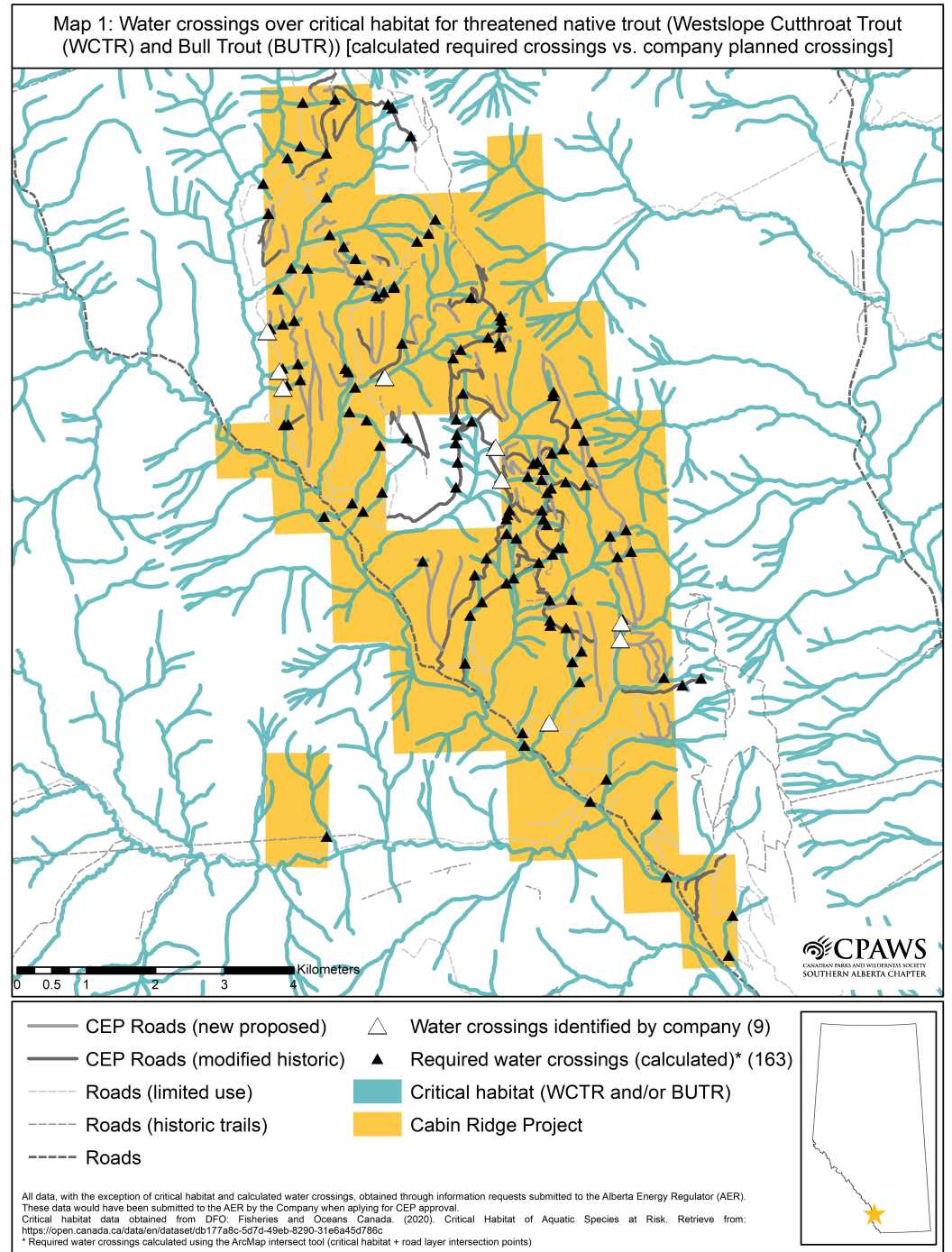
- Cabin Ridge Project
- Chinook Vicary
- Chinook South
- Elan South
- Grassy Mountain
- Isolation South
- Tent Mountain
- All other projects

Probability of Bull Trout Occurrence

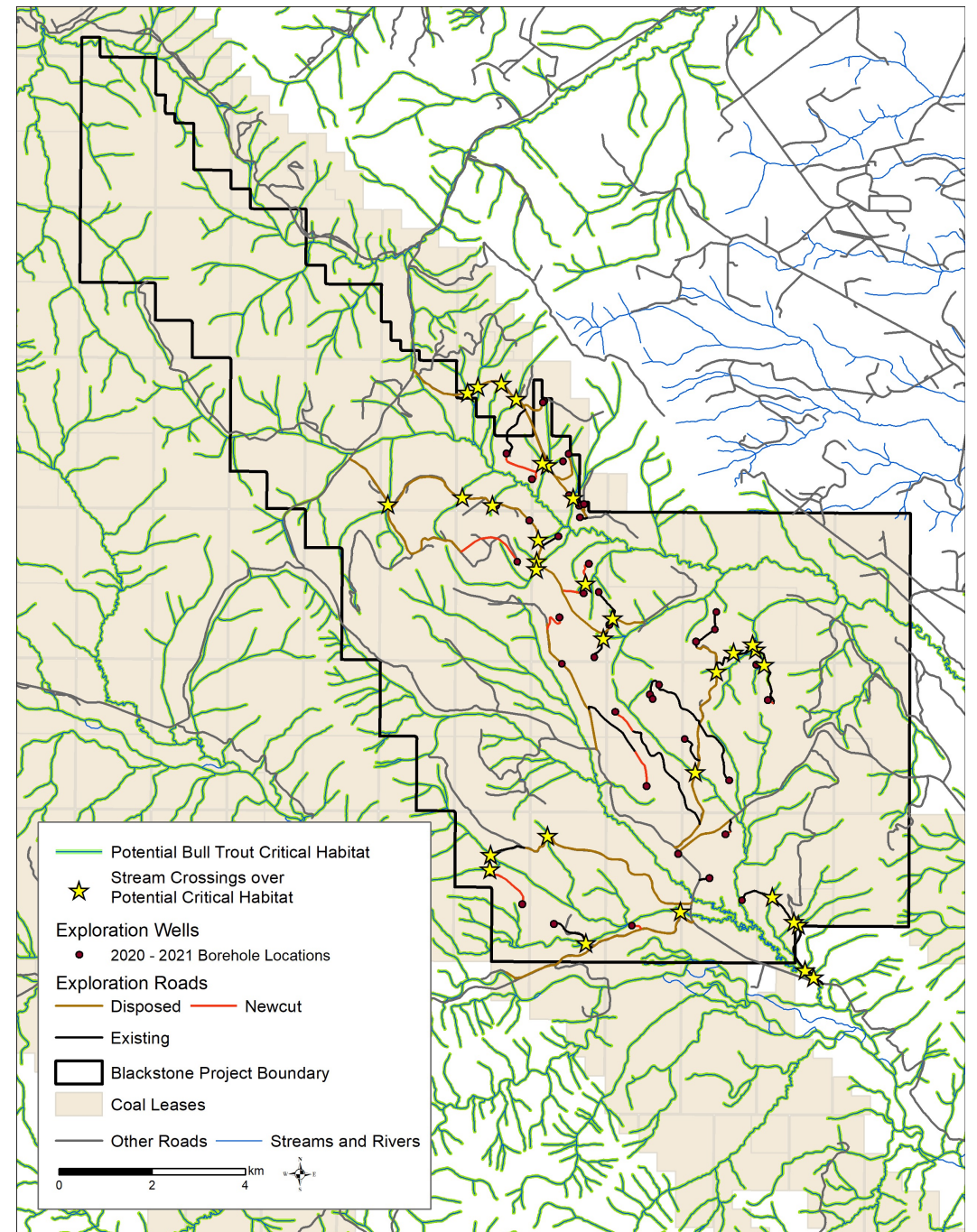
Ripley, T., G. Scrimgeour, M.S. Boyce. 2005. Bull trout (*Salvelinus confluentus*) occurrence and abundance influenced by cumulative industrial developments in a Canadian boreal forest watershed. Canadian Journal of Fisheries and Aquatic Sciences 62(11):2431–2442



Cabin Ridge Approved Exploration Roads and Critical Habitat Stream Crossings



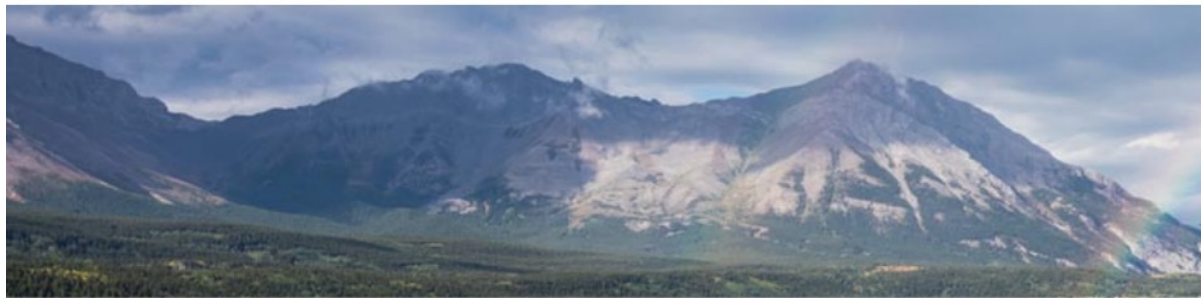
Blackstone Approved Exploration Roads and Critical Habitat Stream Crossings



Wilderness and Recreation Values



ALBERTA SOUTHWEST



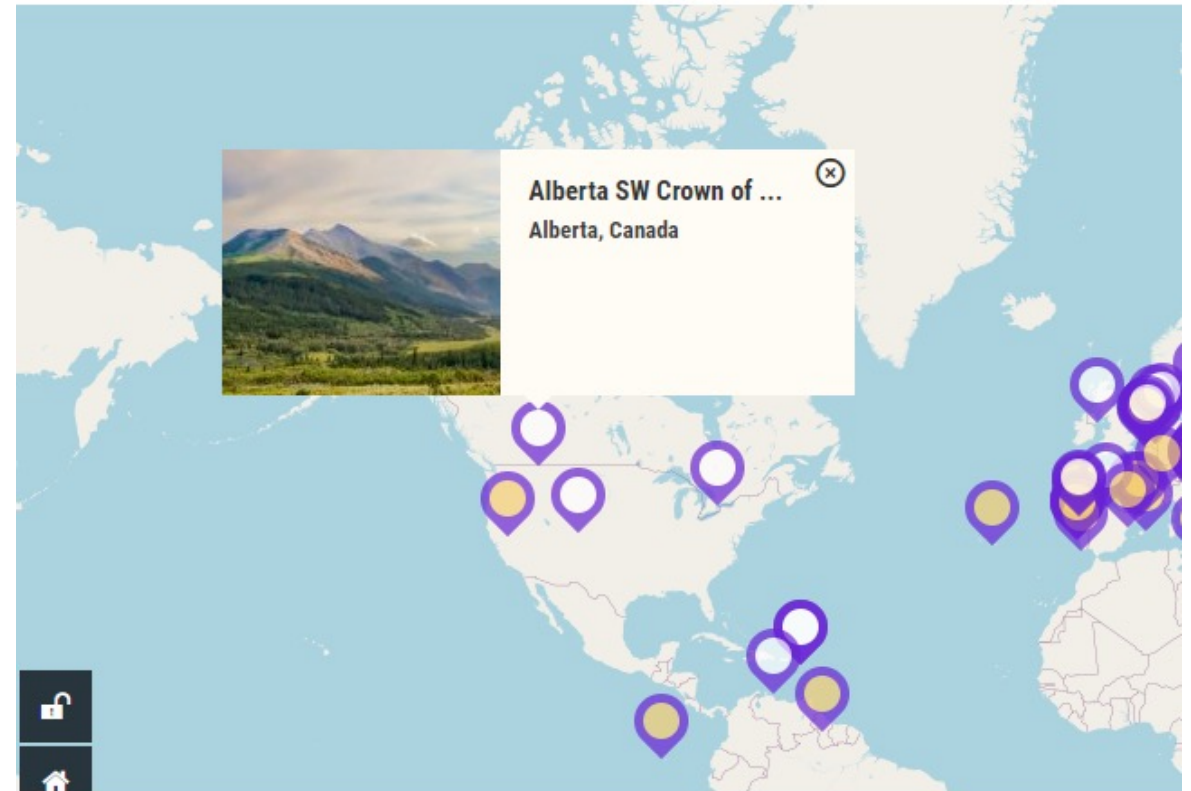
Sustainable Destination Awards
#3rd
'Best of the Americas'



ITB
BERLIN

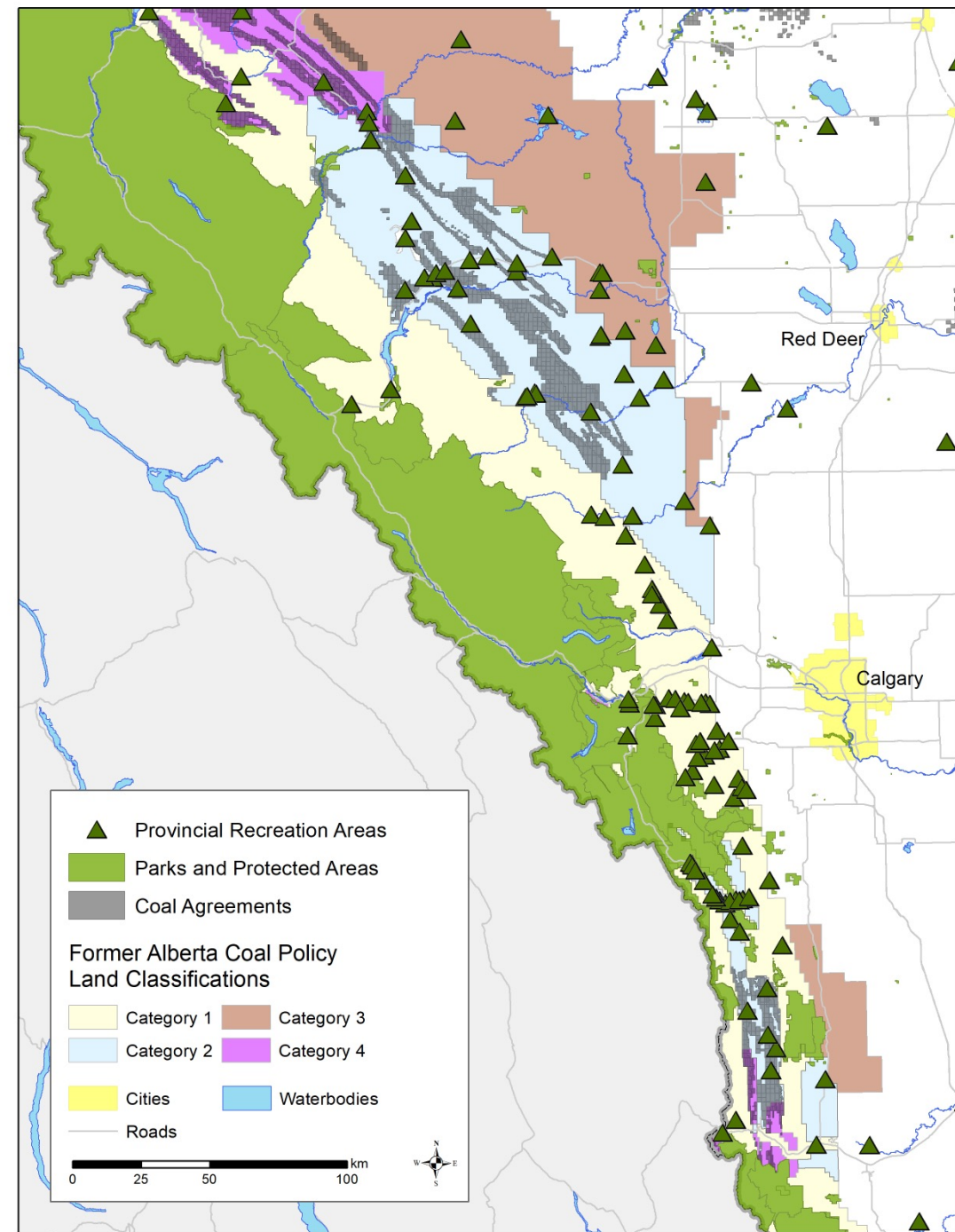


SUSTAINABLE
DESTINATIONS **TOP 100**





Proximity to Parks and Recreation Areas



Tourism and Recreation on Public Land

Loss of Access and Impacts to Experience



CPAWS and Y2Y Recommendation

No further coal exploration or development permitted on the Eastern Slopes of Alberta, including expansions of existing operations.

The new Coal Policy should not include new categories, rather it should cover the entire area previously covered by the 1976 Coal Policy and prohibit new exploration and development in this entire area.

Existing thermal and metallurgical coal mining operations in this region will be permitted to reach the end of their lives.

Mines must meet all provincial and federal guidelines and regulations, including water quality guidelines, during that time.

Reclamation of lands disturbed by coal exploration activities with coal exploration permits must be reclaimed by 2025

Reclamation costs should be covered in full by the companies and not fall to the taxpayer.